

# **MedQuest Software**

# MedQuest Manager (SMS) Reference Manual

Version 7.00

June 30, 1999

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# **OVERVIEW**

# **INTRODUCTION**

The MedQuest Manager Software (formally known as SMS) provides System Managers with program functions that help manage the data entry systems and their components. It provides program functions such as: managing the database locations; maintaining databases through compacting and repairing; editing the Employee Database; and importing and exporting data.

While working with the application, the user can access the help specific to the window on which he/she is working by pressing the <F1> key. The content of the help information displayed is the same as the information provided in this manual.

# **QUICK START**

#### **INSTALLATION**

This section discusses the following topics:

- Hardware
- MedQuest Manager Components
- MedQuest Manager Installation
- MedQuest Manager Help

#### **Hardware**

To operate the MedQuest Manager Software, the following hardware/software is required:

- IBM or IBM-compatible personal computer with 80486/50 or higher processor
- VGA or VGA-compatible display monitor
- MS-DOS® version 5.0 or higher and Microsoft Windows version 3.1, '95, '98 or NT
- Microsoft or Microsoft-compatible mouse or pointing device
- Hard disk with a minimum of 12 megabytes of space
- Eight megabytes of RAM (sixteen are recommended)

# **MedQuest Manager Components**

The MedQuest Manager software components consist of:

- MedQuest Manager setup diskette
- Libraries setup diskette

To install, reinstall, and uninstall the MedQuest Manager software, follow the instructions described in the following sections.

# **MedQuest Manager Installation**

The installation of the MedQuest Manager Software and other required components are explained in detail in the README.TXT file found on the installation diskette.

# Help

General online help is available in the MedQuest Manager program. To access context sensitive help from any window, press the <F1> key.

# MEDQUEST MANAGER FUNCTIONS

### **MANAGE MODULES**

#### **Set Paths**

The **Manage System Databases** function is the core of the MedQuest Manager. This function is used for each MedQuest module to identify the locations of the required databases by setting the file paths for the Project Module, Medications Database, Dictionary Database, Database, and Employee Database.

To begin setting these paths to the required databases, indicate the path to the **Project Database** (FILES.MDB) in the *Path to Modules* text box. The Project Database contains the locations of the Dictionary, Data, Medications, and Employee Databases of the selected MedQuest module.

#### **Activate the Module**

To the right of the *Module Acronym* text box, there is a check box labeled *Module Active*. This check box indicates whether the module is available and the disk locations associated with the Module are properly configured. Check this box to indicate that the MedQuest module is active. The MedQuest Manager program functions can operate only on those modules that are marked as active.

#### **Set the Module Paths**

Select a desired module from the *List of Modules* list box or type the acronym that represents the desired module in the *Module Acronym* text box. After the module has been selected, indicate the paths to the following databases:

**Path/Filename of Dictionary** Indicates the path and filename for the Module Dictionary file **Database** (e.g., MYJOB.MDB, or any valid filename).

Path to Data Database Indicates the path for the Module Data file (e.g., CCP.MDB).

Path to Medications Indicates the path for the Medications Database (MEDS.MDB).

Database

\_ .....

Path to Users Database Indicates the path for the Module Employee Database

(EMPLOYEE.MDB).



The MedQuest Manager validates whether the path to each file is in the location indicated. Valid information that has been entered is displayed in black; invalid information is in red.

## **IMPORT CASES**

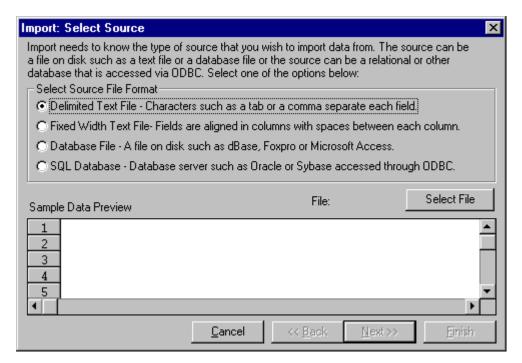
The **Import** function allows the user to import cases into a module's clinical database from several different sources including comma separated text files, fixed width text files, dBase databases, and any ODBC datasource.

Data can be imported into the singles table of a module's clinical database (e.g., the CCP table in CCP.MDB) as well as the multiples tables in a the clinical database (e.g., CCPML1, CCPML2, etc.).

The **Import** no longer makes distinctions between original abstraction cases (REABSTRA field of "0") that belong in the main clinical database and reabstraction cases (REABSTRA field of other than "0") that belong in the clinical database in the REAB subdirectory.

# **Importing External Data**

When calling the **Import** from inside the MedQuest Manager, the user will be prompted to choose a module. Once an active, valid module is chosen, the **Import: Select Source** screen will be displayed.



There are four file types that can be used as sources to import into the clinical database. They are:

- Delimited Text File. A character such as a tab or a comma separates each of the data elements.
   Data elements may be enclosed in quotation marks to handle an embedded separator that may be part of a data element.
- **Fixed Width Text File**. Data elements are arranged in columns that are separated by spaces. The chosen column width determines the beginning and end of each data element.

- Database File. Data elements are imported from an external database such as Microsoft Access, dBase III, dBase IV or FoxPro.
- SQL Database. Any database server or other data source that can be accessed through the Open Database Connectivity (ODBC) protocol. These may be SQL Server, Oracle or Sybase servers or other databases that can be connected by ODBC.

When one of these file types is chosen, the <SELECT FILE> is used to actually choose the file. In the case of the **SQL Database**, the <SELECT FILE> button becomes the <SELECT SOURCE> button to choose the ODBC datasource name. When importing from a database, the user will also be asked to choose which table to import from as part of the selection of the Database file or Datasource.

The sample data preview shows the first 25 or fewer lines of data in the source that has been chosen. This is used to ensure that the connection or file is correct and usable. No formatting of the data is done for the sample data preview for **Delimited** or **Fixed Width** files. For **Database File** or **SQL Database**, the sample data preview is arranged into columns much like a spreadsheet.

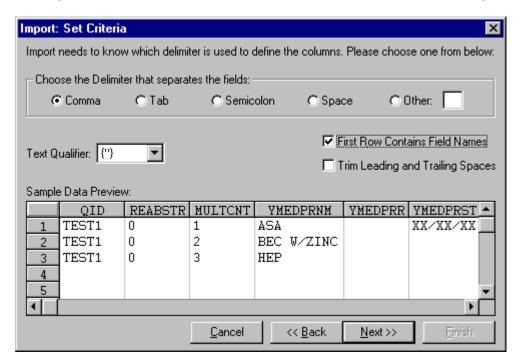
### **Ordering the Screens**

The functionality and windows used in the **Import** will vary based on the type of file being imported. They all share the same first and last windows, but the middle windows will change based on the exact source of import data.

| Import File Type      | Windows Used During Import |
|-----------------------|----------------------------|
| Delimited Text File   | Select Source              |
|                       | Set Delimited Criteria     |
| Fixed Width Text File | Select Destination         |
|                       | Select Source              |
|                       | Set Column Widths          |
|                       | Select Destination         |
| Database File         | Select Source              |
|                       | Select Destination         |
| SQL Database          | Select Source              |
|                       | Select Destination         |

### **Setting the Delimited Criteria**





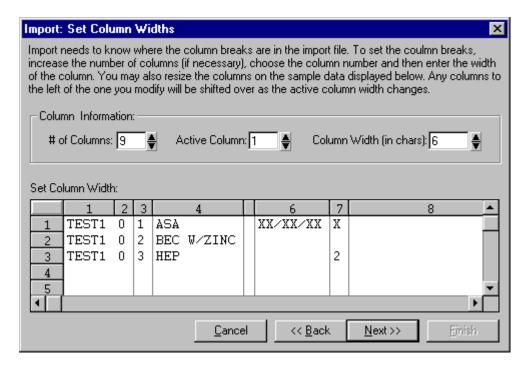
Parameters are set that tell the **Import** what kind of delimiter to use when reading the file and determining where the data elements begin and end. Comma, tab, semicolon and space are the most common delimiters, but the user can choose any delimiter that is not listed by checking *Other* and entering the desired delimiter character. The *Text Qualifier* is used to tell the **Import** what character is used to wrap around a data element that may contain an embedded delimiter character. For example, if the delimiter character is a comma and a data element contains an address such as *100 Main Street, Centerville, TX* then the data element needs to be enclosed in the text qualifier to make sure that the **Import** doesn't treat the address as three separate data elements.

Some delimited files often contain the fieldnames in the first row and the check box can be used to indicate this. Finally, if there appears to be extra spaces in the data elements, they can be removed from the beginning and ending of the data elements by checking the *Trim Leading and Trailing Spaces* box. Note that if the data for the Delimited Text file is too long, the data will be truncated.

The Sample Data Preview display will update itself based on the changes that are made in the top portion of the screen. This can be used to ensure that the data look correct before choosing to which table and fields to import.

### **Setting the Column Widths**

The **Import**: **Set Column Widths** screen is used to tell the **Import** the width of the columns in the import file.

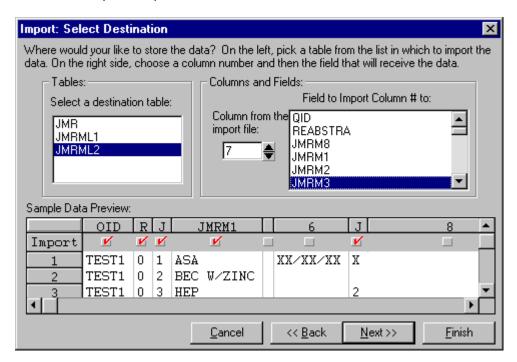


To import a Fixed Width Text file, the **Import** needs to know the width of each of the columns in the text file. Using this screen, enter in the number of columns there are and set the width of each of the columns. To select a column to resize, choose either the *Active Column* text box or simply click on it in the list. To resize the active column, use the <COLUMN WIDTH> spin buttons to change the width. The sample data displayed on the lower half of the window will change according to the settings made to the top of the screen.

The other way to resize a column is to place the mouse pointer over the black divider line between the two columns in the header area in the sample display. The cursor will change to indicate that the column can be resized. Drag the mouse and the column will resize with the mouse. When the mouse button is released, the window will be updated to reflect the change in the column width.

#### **Selecting the Destination**

The final step in importing any file is choosing which columns in the data to import and choosing the corresponding destination fields in the destination database. When this window is opened, and the import file is a Delimited Text with fieldnames in the first row, then these fieldnames will be displayed in the first row of the sample data preview.



First, select the destination table from the list in the *Tables* list box. When this is done, the list of fields will be filled in the *Columns and Fields* list box. In the case of Delimited Text with fieldnames in the first row, Database File or SQL Database import, any fields in the *Sample Data Preview* display will be compared to the fields in the destination table. If there are any matches, those fields will be marked for import using the check boxes in the second row of the *Sample Data Preview* display.

The row of import check marks can be used to exclude or include any of the columns in the import data. To select a column from the import data, either click directly on the column or enter the number in the Column from the Import File text box. Once a column has been selected and a field chosen from the list of fields, the fieldname will be entered into the column heading and the column will automatically be checked for import.

When the settings are complete, click on the <NEXT> or the <FINISH> button to begin importing the file. It may take some time to import the file, and at this time there is no status bar to indicate the progress of the import. There will be a popup message to let the user know when the import is complete. A status bar will be added at a later date.

#### NOTE:

Currently, the user is limited to importing 100 fields of data. To import additional data, use Microsoft Access and/or the **Load** function in MedQuest.

To exit the **Import** program function, click on the <EXIT> button.

## **EXPORT CASES**

To initiate the **Export** function, select either the Export option from the FILE menu item or the <EXPORT> button on the **MedQuest Manager** screen. The **Export Cases** screen will appear. Choose a destination directory and click on the <EXPORT RECORDS WHERE> button or the <EXPORT ALL RECORDS> button to display the *Select Module* popup box to choose an active, valid module from which to export data.

#### NOTE:

If the user is exporting directly from the MedQuest software, this selection process will be bypassed since the module for which the export will occur is already active.



After a valid module has been selected, follow the instructions below.

# **Export Action**

Check one or more of the following options:

- Export Clinical Data. Checking this option enables the File Format options. This is used for the most basic of ASCII or dBase exports.
- Write SAS Input Statements. When this option is selected, the MedQuest Manager will generate SAS input statements in the list-input format based on the natural order of the variables. It will also calculate the length of each record for the input statement. All the fields, including dates, are assigned the \$CHARn format.

• Write Stata Input Statements. This option works in a manner similar to the above SAS input statements. However, the variables stored as Memo fields are excluded from the input statement, as are user-defined labels that are excluded on the data entry screens in MedQuest.

# **Destination Directory**

Type in the name of the directory where the files are to be stored or click on the folder icon to select a directory as the destination directory.

#### **File Formats**

There are several formats in which the exported data can be saved. Together, they will be placed in the destination directory. These file formats are available when the Export Clinical Data option is selected.

- ASCII, Comma Delimited; variable names in first row. Exported files are assigned the name of the table and the extension ".CDF". For example, a module XXX might export data to the following files: XXX.CDF, XXXS1.CDF, XXXML1.CDF and XXXML2.CDF. String type variables are enclosed in quotation marks to handle any commas that may appear within the data. The first line of each CDF export file will contain the fieldnames of all the variables and will correspond to each data element in the export file. This file format is recommended for creating an import file for the MedQuest Manager.
- ASCII, Comma Delimited; no variable names. With the exception of not including variable names
  in the first row, this export is the same as the comma delimited export described above. This file
  format also has the ".CDF" extension.
- ASCII, non-delimited (requires input statement for file layout). This is useful for reading data into analytic software with a record layout (such as SAS or Stata) using the SAS input statements or Stata dictionaries described above. This file is in fixed-width format and has the ".TXT" extension.
- dBase III/dBase IV. Tables are exported to XXX.DBF, XXXS1.DBF, XXXML1.DBF, etc. for both versions of dBase. Memo fields are exported as well.

#### NOTE:

Selecting either of the dBase file formats will automatically default to export all tables including derived and Opening screen objects and the user will only have the option of exporting all of the records.

### **Options**

The user also has the option of including the tables that are created for derived variables when using the **MedQuest Analyzer** and the **Opening** screen objects developed in MedQuest to export. See the Analysis Reference Manual for complete details about derived variables and the MedQuest Reference Manual for complete details about the **Opening** screen objects.

# **Export**

Clicking on the <EXPORT ALL RECORDS> button will export all of the records in the specified file format. Clicking on the <EXPORT RECORDS WHERE> button will take the user into the **Edit Rules** screen. From here the user can define the cases to export based on a set of logic. For example, to export cases determined by a specific date, the user could enter a rule to export cases equal to a certain Discharge Date. This is a dynamic query create to export a record(s) once. After the export process, the rule/query is not saved.

#### NOTE:

The **Edit Rules** screen is the same Rule Editor used in the MedQuest software. Refer to the MedQuest Reference Manual for complete instructions on how to use the Rule Editor.

After completing a rule for exporting specific records, a popup box asking "Query will result in X records to export. Export?" will be displayed. Click on the <YES> button to complete the export or the <NO> button to cancel the export. When the export has been completed, a popup message box will state that the export process has been completed and it will list the files that were created. Click on the <OK> button after viewing the message.

To exit the **Export** program function, click on the <CLOSE> button.

# **Name of Exported Files**

Each filename consists of two components. The first is the table from which the data were exported. The second component is the file extension that defines from what format the file was exported.

The following file extensions are for ASCII exported files. The file extension "CDF" indicates that the exported file is a comma delimited file; the file extension "RAW" indicates that the exported file is a non-delimited file; the file extension "TXT" indicates that the exported file is a fixed column file

The file extension "DCT" uses the ASCII non-delimited file when writing a Stata dictionary and the file extension "SAS" uses the ASCII non-delimited file when writing SAS input statements.

The file extension "DBF" indicates that the exported file is either dBase III or dBase IV.

Assuming a module name of XXX and a comma-delimited export, single-variable (non-medication and non-incident) data are exported to XXX.CDF, XXXS1.CDF, XXXS2.CDF, etc. Multiple-variable (medication and incident) data are exported to XXXML1.CDF, XXXML2.CDF, XXXML3.CDF, etc.

#### **EXAMPLE:**

PNE.CDF Indicates an exported comma delimited file from the PNE single-variable

table in the PNE module

PNEML2.CDF Indicates the exported comma delimited file from the PNE second multiple-

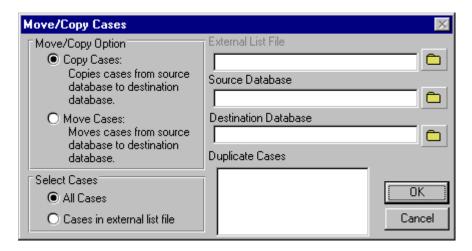
variable table in the PNE module

FIB.TXT Indicates the exported fixed-column file from the FIB table in the FIB

module

## **MOVE/COPY CASES**

The **Move/Copy** program function is used to move or copy records from one or more clinical databases of the same module into a new clinical database file. This may be performed when multiple copies of a given module have been installed on different computers and the abstracted data need to be brought together into one database.



Select the **Move/Copy** program function and follow the instructions below.

- Choose the Function. Choose either the Copy Cases or the Move Cases option from the Move/Copy Option box. If the user chooses to copy cases, the cases will remain in the source database and will be added to the destination database. If the user chooses to move cases, the selected cases will be removed from the source database and will appear only in the destination database.
- Select Cases. The user can choose either the All Cases or the Cases in External List File option from the Select Cases box.

#### **All Cases**

This option moves or copies all cases contained in the source database into the destination database.

#### **Cases In External List File**

Only those cases whose Case IDs are contained in a list file which the user must specify will be moved or copied from the source database into the destination database. If the user chooses this option, the *External List File* text box will be enabled and the full path and filename of the list file can be entered.

In addition to the Case IDs, the list can specify the Reabstraction ID of the cases to be moved or copied. This is useful because a database containing reabstracted cases may contain multiple cases with the same Case ID and the user may not wish to move all of them.

- Enter the full path and filename of the source database in the Source Database text box.
- Enter the destination database in the Destination Database text box.
- Move or Copy. Click on the <OK> button to begin the move or copy.



The source and destination databases must have the same filename (e.g., CCP.MDB). When moving/copying, the structures of the two databases are compared to ensure that they are the same; the Move or Copy will not work if the databases do not have the same structure or version. This comparison is performed in a number of tables in the database and within a number of fields in each table.

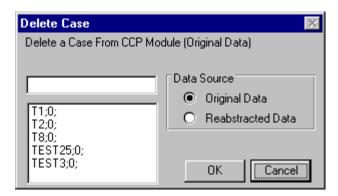


Move/Copy will not move or copy any case with a Reabstraction ID other than "0" into a database containing Original cases (all of which have Reabstraction IDs of "0").

To exit the **Move/Copy** program function, click on the <CANCEL> button.

## **DELETE CASE**

The **Delete Case** program function allows the user to delete a case from a module clinical database.



Select the **Delete a Case** program function and follow the instructions below.

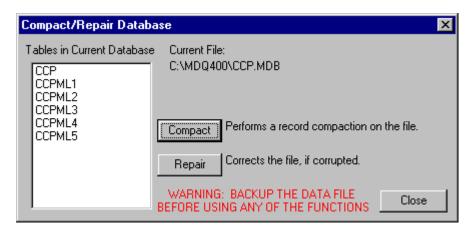
- From the Select Module window, choose a module whose cases are to be deleted.
- From the Delete Case window, select the case to be deleted by marking the desired case in the list box.
- If applicable, indicate the type of case to be deleted (i.e., Original Data or Reabstracted Data) by
  clicking on the radio button that represents the desired type in the Data Source box.
- Click on the <OK> button at the bottom of the window to delete the selected case.
- To exit the **Delete a Case** program function, click on the <CANCEL> button.



Only one case can be deleted at a time. To delete another case, select a new case in the *Selected Case* list box and follow the procedures described above.

## **COMPACT/REPAIR DATABASES**

The **Database Utilities** program function enables the user to compact or repair module databases.



The **Database Utilities** program function can be accessed by clicking on the <COMPACT/REPAIR DATABASES> button or by selecting the *Compact/Repair Databases* option from the DATABASE menu. Select the desired module from the **Select Module** window.

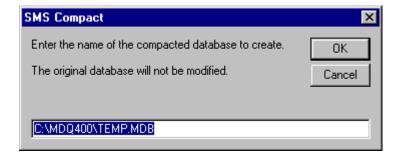


Backup a data file before performing any of the utility operations.

# **Compact**

The **Compact** program function performs record compaction on the selected module clinical database to recover space when records are deleted. Since the size of the database files does **not** decrease when records are deleted from the database, it is recommended that this program function be used when a large number of cases have been deleted from the database.

Before the compaction, the **Compact** program function copies all data from the file to be compacted to a temporary file. Then the program function performs the actual compaction on the temporary file. To protect the data integrity, the MedQuest Manager will **not** copy the compacted database over the working database.



To begin compacting the database, click on the <COMPACT> button. The MedQuest Manager will prompt the user for the name of the file to which the data will be compacted. Enter the directory and filename and click on the <OK> button to compact.

The amount of time it takes to compact depends on the size of the database and the speed of the computer.

To exit the **MedQuest Manager Compact** window without executing the **Compact** program function, click on the <CANCEL> button.



Do not interrupt the compacting process. An interruption may leave the database in an unstable state and could result in data loss.

After compacting and verifying that the compaction has been done properly, it is important that the user replace the working database with the compacted one because the MedQuest Manager does not perform the replacement automatically.

# Repair

As a standard procedure, the MedQuest Manager automatically checks whether the databases are corrupted each time a module is opened. If a corruption is found, the MedQuest Manager will prompt the user to correct it. In addition to the automatic repair procedure, the *Repair* option is also provided in the MedQuest Manager. The **Repair** program function fixes any index corruption and attempts to recover from data loss.

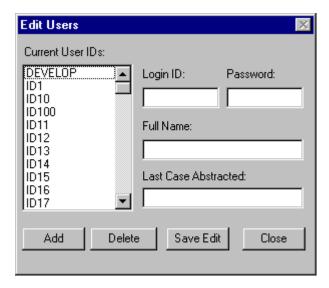
To repair, click on the <REPAIR> button. The MedQuest Manager will begin repairing the database. The message "Do Not Interrupt This Process" appears in the message window. Choose the <OK> button in the message window to begin restoring the database. When the repair is complete, the message "Repair Completed" is displayed on the window.



Since the Repair program function works directly on the working database, it is strongly recommended that the working database be backed up before the Repair begins. Although the Repair program function will fix most of the corrupted data, it may not be able to restore the working database when it is extensively damaged. If this occurs, the Repair program function may truncate the contents of a database; this results in an unrecoverable loss of data. The MedQuest Manager will not provide a warning if the truncation takes place.

## **EDIT USERS**

The **Edit Users** program function enables the user to add, edit, or delete user information for various modules.



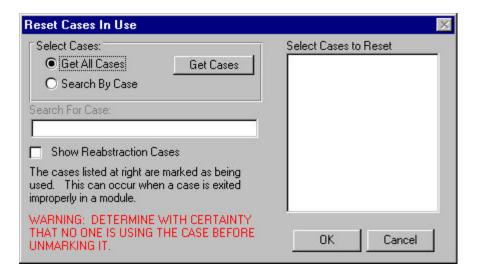
Select the **Edit Users** program function and follow the instructions below.

- From the Select Module window, choose a module whose users are to be added, edited, or deleted.
- Perform a desired function: add a new user, edit an existing user, or delete a user.
- To add a new user, click on the <ADD> button after entering all of the required user-related information.
- To update information on an existing user, click on the name of the user in the current *User IDs* list box and type the new information into the appropriate text boxes to the right (i.e., *Full Name* and *Password*). Click on the <SAVE EDIT> button to save any changes.
- To delete an employee from the list, click on the desired login ID in the current User IDs list box and then click on the <DELETE> button.
- To exit the **Edit Users** window, click on the <CLOSE> button.

#### **RESET CASES IN USE**

While abstracting a case in a module, the abstractor has exclusive access to that case. It is possible for the abstractor to exit a case improperly (e.g., as a result of a power failure) without the case being marked as closed. The Cases in Use option enables the user to reset the case as no longer being in use so that it can be accessed again for abstraction purposes.

The user can choose to display a list of all cases currently in use or search for and display only a selected case.



Select the Case in Use program function and follow the instructions below.

- From the Select Module window, choose a module whose cases are to be reset.
- Choose either the Get All Cases or Search By Case option from the Select Cases box. If Get All
  Cases is chosen, the user is selecting every case marked as currently in use. If Search By Case is
  chosen, the Enter Case ID text box will appear and the user can enter the Case ID of a case to reset.
- If applicable, mark the *Show Reabstraction Case* check box to display reabstraction cases in use rather than original cases in use.
- Click on the <GET CASES> button. The cases that have been selected will appear, in alphabetical order, in the Cases Being Abstracted list box.
- Select the case(s) on the Cases Being Abstracted list box to be reset.
- Click on the <OK> button to reset the case.



Before resetting a case(s), it is important to ensure that the case(s) to be reset is not actually being used by anyone. This is particularly important when the MedQuest Manager is installed in a network environment. If a case is reset while in use, inaccuracies may be introduced into the clinical database. To exit the Cases in Use program function, click on the <CANCEL> button.

### **EXIT**

This option allows the user to exit the MedQuest Manager.

# **VIEW ERRORS**

Errors that occur during certain MedQuest Manager operations (e.g., **Import**, **Export**) are appended to the text file SMS.ERR. To view the error file, select the View SMS.ERR option from the FILE menu. Use the <ARROW> up/down keys to scroll through the report.

The SMS.ERR file should be purged periodically by selecting the *Clear Errors When Done* check box below the **View Report** window or by choosing the Delete SMS.ERR option from the FILE menu. The MedQuest Manager will continue to operate regardless of the size of the file. If the SMS.ERR file does not exist, the MedQuest Manager automatically creates one when it needs to log an error.

# REPAIR UTILITY FOR MICROSOFT ACCESS DATABASE

#### INSTALL AND START UP

This utility is automatically installed with the installation of the MedQuest Manager software. The utility module is named REPAIR.EXE. Use standard Windows procedures to execute this utility.

### REPAIR

The Microsoft Access Databases Repair Utility is designed to fix any Microsoft Access database that becomes corrupted. To use the **Repair** utility, select the file using the drive, directory, and file list boxes on the single window that comprises this utility. The name of the file that has been selected appears in the lower left portion of the window.

To begin repairing, choose the <REPAIR DATABASES> button.

The utility will try to repair the database. If successful, the message "Repair Finished" is displayed; otherwise an error message is displayed.

This function only works on a valid Microsoft Access 2.0 database with an ".MDB" extension.



IMPORTANT: It is strongly recommended that the databases be backed up and archived before the Repair utility begins. Not all damaged Access databases can be repaired by this or any repair utility. If a database is badly corrupted, data truncation may occur as the result of a repair and data loss may result.

To exit the **Repair** utility, choose the <QUIT> button.